

# • C o u n t e r p o i s e •

## The Amateur Radio Club of El Cajon

Volume XLX

May 2009

Number 5



Amateur Radio Club of El Cajon meets every 2nd Thursday at 7:00 pm at the First Lutheran Church of El Cajon. The address is 867 South Lincoln Ave. Next meeting: May 14, 2009 7:00 pm

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All Official written communication is to be submitted to:

A.R.C.E.C. P.O. Box 50, El Cajon, CA 92022

The Counterpoise is a publication of the Amateur Radio Club of El Cajon (ARCEC). It is published once monthly and contributions are accepted from officers and members of the club. We also encourage input from members of the Amateur Radio Club of El Cajon. Opinions expressed are solely that of the author and do not necessarily reflect the opinions of the Amateur Radio Club of El Cajon (ARCEC). Articles may be submitted either by e-mail or mail to the editor.

Paul Rios at:

WA6BGScounterpoise@cox.net or by post  
1237 Victor Ave #4, El Cajon, CA 92021

The Deadline is Sunday after the General Meeting.

Amateur Radio Club of El Cajon

Web Site: <http://www.wa6bgs.org>

Counterpoise E-Mail address

WA6BGScounterpoise@cox.net



**WAMO 800**  
**Al Gentz, KA6RLX**  
**WAMO #729**

**Next Meeting**

**Final details and preparations for  
Field Day 2009**

## 2009 Officers

President	KC6QLS	Paul Rios	593-9445
Vice-President	KO4QT	Steve Weed	733-2320
Secretary	N6OPH	Mike Maston	296-9067
Treasurer	W6GRK	Gary Kushe	562-5391

## 2009 Board of Directors

Affiliated Clubs	AE6AV	Larry Plummer	460-1818
Instructor	AE6QW	Gordon Shackelford	561-6323
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Public Service	N6NKJ	Rich Beisigl	444-5465
Social Chair	KI6JUD	Linda Weed	971-1535
Past President	KG6JCW	Mike "Stogie" Panger	263-4439

## 2009 Standing Committees

Bylaws	N6OPH	Mike Maston	296-9067
Club Attire	K6PKS	Paul Schmidt	733-2284
Counterpoise Editor	KC6QLS	Paul Rios	593-9445
Education	N6OPH	Mike Maston	296-9067
Elmer	WA6L	John Graf	368-7413
EOC H2O District	N6NKJ	Rich Beisigl	444-5465
Estate Sales	N6JOJ	Tom Myrick	449-3547
Field Day	KO4QT	Steve Weed	733-2320
Health & Welfare	AF6BC	Floyd Lang	697-8655
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Photographer	KI6EEL	Bridget Rios	
Post Mistress	KC6TBG	Ann Rios	593-9445
Prizes	AF6BC	Floyd Lang	697-8655
Public Relations	KC6QLS	Paul Rios	593-9445
SANDARC Delegate	K5WFW	Len Fulbright	258-1322
Swap Meet	N6JOJ	Tom Myrick	449-3547
Technical	W2IRI	Bob Boehme	448-4728
Ticket Lady	KI6EEK	Lisie Rios	
WA6BGS Trustee	AE6CQ	Michael Martak	562-6477
WAMO	AE6CQ	Michael Martak	562-6477
Web Master	KC6QLS	Paul Rios	593-9445
Welcome	KI6EEL	Bridget Rios	

## Staff and Writers

KC6QLS	Paul	Editor
KO4QT	Steve	Vice President
N6OPH	Mike	Meeting Minutes
KI6FIH	Tassy	HAM Spot Light
AE6CQ	Michael	WAMO
W5COM	Tom & Lisie	Jokes
N6NKJ	Rich	Amateur Radio at Large
WA6L	John	Down Below in EC
WA6MHZ	Pat	Crest Radio Museum
KI6EEL	Bridget	Photos

## SANTEE DRIVE-IN SWAP MEET

10990 Woodside Ave., North  
FOR INFORMATION, CALL 449-SWAP  
Ham Radio, Computers, Electronics  
ACRES & ACRES OF BARGAINS  
1st & 3rd Saturday of the Month  
GATES OPEN 6:30 AM

## From The President

**Paul KC6QLS**



I would like to say thanks to the members for passing the last Bylaw change. The new Bylaws will be posted to the website soon for all to read and keep in their records. From time to time the Bylaws need to be updated, and I believe we have a solid set of Bylaw now and will not have to touch them for some time.

I would like to say thanks to Steve, AD6VI for talking to us about where the local ARES stand and what the ARRL is doing. Also, thanks to Andre Hansen, K6AH for talking about the new way of communicating at the runs. It looks to be very promising.

Lastly, I am happy to report that we have over \$500.00 toward the Field Day Food Fund. As you know, the budget this year was tight, and the club is pulling together to make Field Day a success. Last year we spent over \$1,000.00 for food, and this year's goal is \$1,000.00 so we are half way there.

Thank you for your continued support, and let's make this the best Field Day ever.

73

**Paul Rios, KC6QLS**  
President



## Amateur Radio Club of El Cajon

General Membership Meeting  
9 April 2009



The General Membership meeting was opened by the Club President Paul, KC6QLS at 1900hrs. After the pledge of allegiance, visitors were welcomed.

**SECRETARY** Mike, N6OPH read the Minutes because the Counterpoise hasn't been published. The Minutes were approved as corrected.

**TREASURER** Gary, W6GRK read the Treasurer's Report. It was approved as read and filed for audit.

**WAMO:** Mike, AE6CQ awarded WAMO Certificates.

**LOGO CONTEST** was submitted for the judgment of the General Membership. Entry number three was the winner. It depicted a house in the forest topped by a beam antenna.

**BYLAW CHANGES** were given the seconded reading. It was moved and seconded that the Bylaw changes be approved. Motion was carried.

**VICE PRESIDENT** Steve, KO4QT introduced this evening's speaker Andre Hansen, K6AH. He will be speaking on digital communications. Steve Early, AD6VI will talk about ARRL issues and the San Diego Section. After the presentations, there was a twenty minute break.

After the break, the business portion of the meeting continued.

**Ed Pyne, KF6ROE** won the Silent Auction. The item auctioned was an "Edsyn" soldering station. The Library Display is now down and should be viewable at another location shortly.

**PRESIDENT'S REPORT:** The Imperial Valley & ARCEC QSO is still being planned by Paul, KC6QLS and Steve, KO4QT.

**VICE PRESIDENT** Steve, KO4QT noted the Pacific Trail run is also being planned. Steve also talked about the possible Imperial Valley & ARCEC QSO Party at Buckman Springs Rest Stop on Interstate 8. Steve talked about all of the agencies that would need to pass on setting up this QSO party. No date for this event has been scheduled. Steve mentioned that his Tourette's Syndrome is in recurrence. For the remainder of 2009 all of the programs for the General Membership are scheduled. The San Diego

County Fair is 12-15 June for the ARCEC at the SANDARC booth. The "Kids Best" will schedule during the same time frame. The club may be making more of the Wooden Morse Code Keys. Field Day is 26-27-28 June. We need a volunteer to man the 75m station during the midnight shift. Field Day T-Shirts will be ordered during the May meeting and would be distributed at the Field Day Site. Field Day pins may also be available from the ARRL. The topic for the May meeting is "Why can't I get a decent match?" It will be presented by John Graff. Steve also mentioned a hoax e-mail regarding San Luis Obispo banning amateur transmitters in the home. The e-mail has been spreading like "WILDFIRE."

**NET MANAGER** Mike, KG6TDP gave his Net Report. The activity is about the same as previous months.

**AFFILIATED CLUBS** report was given by Mike, N6OPH. He reported that the nominations committee reported only four candidates, one for each office. There were no nominations from the floor. The candidates will be elected by acclamation during the April Annual meeting. The candidates are: Mike, N6OPH – Chairman; Paul, KC6QLS – Vice Chairman; Ann, KC6TBG – Secretary and Pat, W6VJT for Treasurer. The Council amended its budget to allow for the immediate use of monies intended for the defense of Amateur Radio.

**MEMBERSHIP** stands at 195. We had 54 members in attendance this evening with 4 visitors.

A total of \$140 was collected tonight for the Field Day Meal Fund and a grand total of \$537.01.

There being no further business before the General Membership, the meeting was adjourned at 2100hrs.

Respectfully submitted,

Michael Maston, N6OPH  
Secretary  
Amateur Radio Club of El Cajon



## From The Vice President KO4QT Steve



I'd like to thank both Steve Early AD6VI and Andre Hansen K6AH for coming to our April meeting to talk to us. Steve provided us with a lot of information about what's going on with the ARRL in the San Diego Section, and Andre's presentation shed a lot of light on how digital Amateur Radio communications will enhance the abilities of processing runner information at this year's May 9<sup>th</sup> and June 6<sup>th</sup>/7<sup>th</sup> SURF Runs.

You may remember from reading my March 2009 column, I mentioned my old friend Chuck, KI6TG. Well, I was talking to Chuck on the phone the other day and he reminded me of an event that happened to him during his very first QSO working Morse code (CW) as a "Novice" Amateur Radio Operator back in 1985.

As you may know, there are a lot of terms used in Amateur Radio that have alternate meanings. Some examples of these are: "HAM" for "Amateur Radio Operator", I'm operating "barefoot" which means "without an amplifier", "eyeball" means an eye to eye meeting between two HAM operators, running a "full gallon" means running a "1000 watt amplifier", "my handle is" means "my name is", "hi hi" is a way of "laughing" over the air without actually laughing, "you're a LID" means "you're a poor operator", or "someone who doesn't follow proper procedures" or sends "sloppy Morse code".

Back to Chuck; there he was, sending CW in a QSO for all he was worth with an old Radio Shack straight key and had just told the HAM on the other end that this was his very first Amateur Radio QSO. Chuck turned the QSO over the other HAM and started copying what was being sent to him. After the initial exchange of call signs, Chuck copied "so lid". Chuck said he couldn't believe this guy was actually calling him a "Lid". He continued to write as this guy was still sending code and



Continued on Page 14

### WA6BGS Nets

Mike Oberbauer:	KG6TDP	Net Manger
Mike Oberbauer:	KG6TDP	Net Controller
Frito	N6WKB	Wide Open Nets
Axel	KI6RRN	Donut Net

### WAMO NETS:

Wednesday and Saturday Nights  
8:00 p.m. local time 7:45 "Early Checkins"  
This is an open net and all are invited. Early check-ins will be taken.

### Donut Net:

Monday, 7:00 p.m.  
Bring your Donuts. GOT MILK?

### Wide Open Ham Net:

Tuesday, 7:00 p.m.

### Frito's Corn Chip Net:

Thursday, 7:00 p.m. on 28.435 Mhz USB

Nets held on Club's WA6BGS Repeaters System  
RX 147.420 (146.475) 107.2 PL  
RX 224.080 – 107.2 PL  
RX 445.900 – 107.2 PL  
Don't miss it. All members welcome.

WAMO means Worked All Members Only.  
The purpose of WAMO is to encourage people to people communication between club members and to publicize the name of the club among fellow amateurs.

## Calendar of Events MAY 2009

May	2:	One-Day Technician License Class
May	2:	Swap Meet, Santee Drive In, 6:30 am
May	2:	T-Hunt, Grossmont College lot, 6:00 pm
May	5:	Board Meeting, 7:00 pm
May	9:	Pacific Crest Trail 50 Mile Run
May	14:	General Meeting, 7:00 pm
May	16:	T-Hunt, Grossmont College lot, 6:00 pm
May	18:	Counterpoise Dead Line
May	23:	Wildland Fire Safety Training
May	30:	East County CERT Academy (starts)

### Upcoming Event Dates

June is packed with events!

June	6:	San Diego 100 Mile Endurance Run
June	12-14:	Del Mar Fair Amateur Radio Booth
June	26-28:	Field Day Weekend!

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Tom Mc Duffie KM6K, Manager  
5375 Kearny Villa Road  
San Diego, CA 92123  
(858) 560-4900 or 1-800-854-6046

The Counterpoise is also online in FULL COLOR. Check it out and the club's website at: [www.wa6bgs.org](http://www.wa6bgs.org)

Get your advanced copy by e-mail. I will send it out in .PDF format the night it goes to print. E-mail me and let me know that you would like a copy. Size of file may be up to 1.5 mb at times.

## Change of Address

### Moving?

Do not miss an issue of the Counterpoise. Fill out the Change of address form below.

Call \_\_\_\_\_ WAMO# \_\_\_\_\_

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

New Address:

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Send to Membership Chairperson:

A.R.C.E.C./ P.O. Box 50, El Cajon, CA 92022

## ARCEC Membership Application

Please print clearly, complete all info and return to Membership Chair with your payment:

( ) Individual Membership \$18.00

( ) Family Membership \$30.00

Name: \_\_\_\_\_

Class of License: \_\_\_\_\_

Other Family Members and Calls: \_\_\_\_\_

Address: \_\_\_\_\_

Call: \_\_\_\_\_ WAMO #: \_\_\_\_\_

Birthday: \_\_\_\_\_ Phone \_\_\_\_\_

Email address: \_\_\_\_\_

Check One: ( ) New Member ( ) Renewal

( ) Returning Member

\*If you are a returning member, you will keep your original WAMO #. \_\_\_\_\_

Check One: I want to receive the Counterpoise Newsletter by: ( ) Mail ( ) Email ( ) Website

Check One: I give my permission to publish my info on the Club Roster ( ) Yes ( ) No

If no, state exactly what information you do not want published: \_\_\_\_\_

Check One: ARRL Member ( ) Yes ( ) No

ARES Member ( ) Yes ( ) No

RACES Member ( ) Yes ( ) No

Would you like to be in the Counterpoise Spotlight? ( ) Yes ( ) No

Would you like to be a member of The East County Response Team? ( ) Yes ( ) No

Mail with payment to:

Membership Chair, ARCEC, P.O. Box 50  
El Cajon, CA 92022

### Computer Roster Available

Want the roster sent to you via e-mail? Send an e-mail to Ann Rios KC6TBG, and she will send you the database back as an attachment. She uses Excel, but may be able to convert to various formats if asked. Send your request to 619-593-9445 or KC6TBG@cox.net

# FUN PAGE

## Birthday

May 1	KG6KLM	Felly	Parel
May 2	KB6MLS	William	Fuller
May 3	NO CALL	Arvilla	Johnson
May 7	KG6IZW	Kristine	Eyer
May 10	K7OY	Maynard	Skidmore
May 10	KI6IOH	James	Glasser
May 11	KE6HBQ	Greg	Richard
May 11	KI6SYO	Joe	McGerald
May 12	KB6WQO	Carol	Myrick (L)
May 13	NO CALL	Zachary	Lang
May 13	NO CALL	Gabrial	Lang
May 14	KA6RLX	Al	Gentz (L)
May 14	KD6ZNU	Shirley	Boehme (L)
May 19	WB6DSP	Dave	Johnson
May 20	K6FQR	Allen	Guinup
May 22	KG6STY	William	Kukuk
May 25	NV6E	Herald	Sawdy (L)
May 30	K6CR	Cliff	Richardson
May 30	KI6HRH	Ken	Cohen
May 30	NO CALL	Ruth	Pattin



## Word Search

M K J M E A S U R E H M T U R R C  
W T N E M E L E T G M G P E K O U  
M U T F Q F T C M H U J Z A U T J  
A Q J K T E K E A W Q Y P N G C P  
T W M U M E M L T G L U T T W U L  
C T J P T D H E K A W E G E A D 2  
H F I 2 G L W B N T R H M N B N 5  
I D H 5 W I F A G P T W P N T I 9  
N D W 9 Q N C T O H K H C A P K M  
G O I A H E G I W M J E W S K J W  
A N I R K M S O R U Q L T M T M A  
J M I T E E F N T C G O P M G F W X  
K E P D E C Q S K A U P O W M A H  
F T L W A N T E N A A I R K I G U  
J 5 2 B F O N I H F T D T L 2 5 9  
F U 9 K A W L O O Q J T E U Q L S  
T A 5 J H C J M C N K H Q G T H P

- |                                       |                                    |
|---------------------------------------|------------------------------------|
| <input type="checkbox"/> ANALYZER     | <input type="checkbox"/> DIRECTION |
| <input type="checkbox"/> ANTENNAS     | <input type="checkbox"/> ELEMENT   |
| <input type="checkbox"/> BNC          | <input type="checkbox"/> FEEDLINE  |
| <input type="checkbox"/> CABLE        | <input type="checkbox"/> HELIAX    |
| <input type="checkbox"/> CELEBRATIONS | <input type="checkbox"/> INDUCTOR  |
| <input type="checkbox"/> CIRCUIT      | <input type="checkbox"/> LOADING   |
| <input type="checkbox"/> CONNECTION   | <input type="checkbox"/> MATCHING  |
| <input type="checkbox"/> COUNTERPOISE | <input type="checkbox"/> MEASURE   |
| <input type="checkbox"/> DIPMETER     | <input type="checkbox"/> PL259     |
| <input type="checkbox"/> DIPOLE       | <input type="checkbox"/> PORT      |

## Brain Thinkers

- 1 = T. that O. K.      1 Time that Opportunity Knocks
- 40 = D. in L.          40 Days in Lent
- 100 = C. in a D.      100 Cents in a Dollar
- This Months -----
- 24 = H. in a D.
- 80 = D. to G. A. the W.
- 1440 = M. in a D.

## Last Months Word Search

C H A S S I S W K O H J T B K T  
U A O B M F V L T W R M L G 9 R  
R K P E W L W H G O U J V W U A  
R W B A S E O F T D 9 F M Q V N  
E J 9 M C H F C Q G O S J U L S  
N M W T J L A V W B G Q P F G N  
T H V M L R T V M 9 W V W K E I  
W F R T A T L A T I G I D N N T  
H O E V F G S M N S S H M O E P  
S R N H U W G P V C G V P H R K  
Q F E T D B 9 L V G E S M A A U  
T K Z U L T J I C O M W P R I W  
O Q M S T K S F T K U J H N O P  
B U C T I N G I N V E R T E R S  
K p L H F O L E K M H S U S L H  
L T J E R R O R M O F Q L S W O  
E L E C T R O N I C J K F J L T



# ASK AN ELMER

"What do you mean I need to tune my antenna? I bought my antenna at the HAM Radio Store, why does it need to be tuned?"

If you look back at the "Ask an Elmer" columns from both the November and December 2008 editions of the "Counterpoise", you'll note the references to "tuning your antenna".

You've most likely heard about "SWR" or "Standing Wave Ratio". Well, as the saying goes, all electronic components are built with smoke in them and when they go bad, they lose their smoke (that's not really true, but they do look and smell like it when they go bad). The same goes for antennas...all are built with SWR's in them (just kidding here as well!). Some SWR's are too high which can cause your radio to lose its smoke (not kidding here!) and some are just right....depending on how you've "adjusted" your antenna. The process of lengthening or shortening your antenna is called "tuning your antenna".

When you get your antenna home from the Amateur Radio Store, and, after you're finished drooling all over the package it came in, you'll quickly tear it open and find..."Oh NO...it has instructions!" And you thought you'd be able to take it out of the box, hook coax to it and be on the air in just a few minutes. Not to worry, the manual is a good thing; it will tell you how to "adjust" (there's that word again) your antenna. If it's a mobile antenna, it will also probably come with an "allen wrench" (hex head wrench). This is provided so that when you slide the whip into the top of the antenna base at just the right length (the lowest SWR at the frequency you're going to be operating), you can tighten it in place. You'll need an SWR meter or antenna analyzer to make these "adjustments".

*Now it's time for a commercial:* At our May Club meeting, you'll learn whether to lengthen or shorten antenna's for given frequencies, and you'll even be able to use an antenna analyzer to tune the antenna's yourself!

Why does this "tuning" need to be done?

Here's some technical stuff you'll need to know. If your antenna is too long or too short, your SWR will be too high and too much power will be "reflected" from your antenna back to your radio. Too much of that reflected power is not good for your radio. With a perfect or "flat match", the needle on your SWR meter will not move, and will stay at "1" which means 1.1:1, and you will

I have full transmitted power going to your antenna (less your feed line loss of course). If your meter reads 1.5, it means 1.5:1 and will give you a 4% loss of your transmitted power. If the needle on your meter reads 2, it means your SWR is 2:1 and your loss of power will be about 11%. You will want to insure that the reading on your SWR meter (or antenna analyzer) is NOT over "2:1" (if it is, don't transmit until you have found the problem and lowered the SWR). An example of this is, if you're transmitting 100 watts output power, have an SWR of 2:1 and have 11% reflected power, you'll essentially have 89 watts going to your antenna and 11 watts coming back into the radio. If your SWR is higher, say 2.5:1, you'll have a 25% power loss..that's 75 watts to the antenna and 25 watts reflected power...that's 25% of your total power output returning back into your radio....your transmitter won't last long at this rate!

There's a really good article in the November 2006 issue of QST magazine that explains Standing Wave Ratio in depth. It was written by Darrin Walraven, K5DVW, and is titled: "Understanding SWR by Example" *"Take the mystery and mystique out of standing wave ratio."*

You can find the entire article on the web at: <http://www.arrl.org/tis/info/pdf/q1106037.pdf>

OK, back to the original question...why do you need to tune your antenna when it's designed as a HAM antenna? As Amateur Radio Operators, we have privileges to operate in radio bands with wide frequency ranges. Because you want the lowest possible SWR for the frequency range you'll most likely be operating in, having an antenna that you couldn't tune would severely limit your operating abilities! That's it in a nutshell...I know, I know, why didn't I just say that in the first place?

*Next month's question is, "What do you mean I need to tune my antenna? I bought my antenna at the HAM Radio Store, why does it need to be tuned?"*

73 Elmer A. Ham

Please submit your thoughts to [WA6BGScouterpoise@cox.net](mailto:WA6BGScouterpoise@cox.net) and the Elmers will answer with your feedback. Also, please send in any question that you might have.

Information and Resources:

Club Members and People thanking of Joining.  
Radio QSO's & Button Hole QSO's

The Editor's  
Corner  
KC6QLS Paul



Editor's Corner

There is nothing like publishing two full Counterpoise Newsletters in one month. I thought of making an April-May issue, but there is just too much information to get out. It's been a very busy month, but I finally found the time to enter everyone's columns into the computer and get the newsletters done. I am involved in many aspects of Amateur Radio. So if I should get behind a little on the Counterpoise from time to time, it's because I'm working on some other part of Amateur Radio, and I appreciate your patience and understanding in this regard.

73 Paul Rios, KC6QLS  
Editor

Public Relations

Sign up for the Del Mar Fair! It is right around the corner. Have your HT ready to go, dust off the Wooden CW Keys, practice your CW, and stand by to copy Kid CW. It can be very fun, particularly when you tell the young person their name and you see their face light up. Now that's HAM RADIO! After all, think back to when you got the bug about Amateur Radio. Did someone show you their radio and take the time to show you the ropes? We need to spark the young person's interest and maybe they will get their Radio License.

73 Paul Rios, KC6QLS  
Public Relations

## Volunteers Needed

### Up Coming Events

Del Mar Fair, Kids Best, Field Day

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## E-Mail

Address for the Counterpose. Please submit all *Counterpoise* Mail to:

**WA6BGScounterpoise@cox.net**

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## Prize Table Needs Help

Thank you for your contributions to the Prize Table! We still need your Support and Help or it may just end up a thing of the past. Please contact: Floyd Lang AF6BC at 303-6711.

---

## Things to keep in mind

*Get on the El Cajon ARC Reflector*

*To sign up visit:*

<http://groups.yahoo.com/group/elcajonarc/>

You will get the latest news about The Club and things going on in the Ham world.

---

## Quote of the Month

"No man was ever wise by chance."

- Lucius Annaeus Seneca

## JOKE

What bird can lift the most? A crane.

What did Delaware? Her New Jersey.

**Lisie KI6EEK**



# Crest Radio Museum

Pat Bunsold, WA6MHZ



## The SONAR CD-2

Over the years, I have shown some RARE radios. Well, today you will be seeing the RAREST of the Rare! This is the Sonar CD-2, a giant 2 meter AM transceiver from 1955. Never heard of one? Then you missed the May issue of QST in 1955. There were even a few ads for them over the course of 1955, but by about 1956, it had disappeared forever.

The CD-2 was primarily designed for Civil Defense stations, today known as RACES. This was not exactly a portable unit. The radio was almost as big as a Collins 75A4, and certainly just as heavy. It had a metal cabinet with a front lid that folded down to make a nice table to log with. Room was provided under the radio bottom was for logs, headphones and mics. 2 large handles on the side were very needed to move it, and I am sure it took some husky guys to lug this around.

Most 2 meter AM transceivers were about the size of a CB set (tube one), but this was extremely large because of all it had in it; a very fancy receiver and powerful transmitter that used a 6252 final tube good for something like 17 watts out. It looks like a short 5894. One downer is that it requires a Carbon mic, hard to come by these days but very common in 1955. I used one from my WW2 Mic collection.

The CD-2 runs off of 117VAC or 6 Volts DC. This was before 12 volt cars. Sonar also made a 6 meter version of this, and none of those have ever been seen or heard of.

My CD-2 came from Ebay, and there was great anticipation and exasperation during the auction. Some rotten SOB bid the thing up and up. He must have known what it was too. Even though the cabinet is missing, it still was bid way high. As the auction was ending, I was outbid and the price was around \$60. I figured the other bidder would never bid more than \$100 for it, but just to be sure, I SNIPED him with a bid of \$177, a truly outrageous and insane bid. But I had to make sure there was NO WAY I would lose this auction. He had bid \$85 so I got it for \$86 plus about \$40 shipping from Washington state. Good thing I didn't have to pay \$177 for it. Many years ago, I saw one go for \$250!

The CD-2 came in with a broken 6252, but I had already acquired a replacement and a spare. The 2 6AQ5s were also short but I had those in my Tube warehouse. I need to put a power Plug on the AC cord, and it will be ready to fire up. There is no VFO for transmit, it uses only 8 Mc. Crystals, but about 6 were supplied. NO, I can't use this radio to talk on, as there is NO 2 meter AM on the bands locally anymore, and repeater owners would be hopping mad to hear a AM set key up on THEIR private frequencies.

I need to make some sort of cabinet for it to protect the insides. This is one of the Rarest radios on Earth and should really be under 24 hour Armed Guard with Automatic weapons! I know the other bidder, if he knew where it went, might try to hijack the Museum to get this! He bid high enough!!!

I will try and bring this to the club meeting to show all the new Hams what the largest and HEAVIEST 2 meter rig ever was!

Pat Bunsold WA6MHZ  
Curator  
Crest Radio Museum



Continued Page 12

# Wooden CW Keys That Really Work

*This is the story behind the Wooden CW Keys. Clubs from all the four corners of the USA have sent e-mails asking, "What is a Wooden CW Key and what do you do with it?" After reading this story, I hope this will inspire you to make some for your next Club event. I know our Club has had a lot of success with them.*

I was talking with Carl Gardenias, W6UD at the Riverside Convention back in 2005. We talked about how to get youth involved in Amateur Radio. He showed me a Wooden CW Key. He took the time to explain it in detail, how to make them, and how to use them to attract the eyes of the younger group. I could not wait to try this in San Diego. The Amateur Radio Club of El Cajon was invited to attend a Fire Station Open House, and we had the San Diego County Fair coming up too.

We got some wood crafters together and started to cut the wood and sand any sharp edges. We also visited a local hardware store and picked up a roll of metal flashing tape with a sticky back. We had totes full of Wooden CW Key parts. It would take hours to cut the tape and make the Wooden CW Key Kits. We had a General meeting coming up so we asked the members to assemble the kits during the meeting. Everyone was ready to help; we had people cutting the tape and others putting together the kits. Within 40 minutes all the kits were ready; all 850 were rubber band and put back into the totes ready for the kids.

At the Open House, kids were lining up waiting to make them. The Open House was only four hours, and we almost ran out of the stock we had on hand. We saved some for the Fair in the other totes at our storage unit. Over all, it did spark an interest in the youth. We had them make the Wooden CW Key, send their name in CW, had someone copy it, and then they got on a real Amateur Radio and talked to one of our members hiding just out of site. This got them really going about Amateur Radio. Some kids talked for minutes and others did not want to leave. It also helps if you have other youth with their Amateur Radio License and wearing their call on a badge. Kids like to see

others their age doing something that they may like to do. Kids will talk to kids and soon they will be asking their folks about Amateur Radio. The very best thing about this event is that the kids get to take the Wooden CW Key with them to keep. One day years down the road, they will come across the Wooden CW Key and remember all the fun they had making it. It may rekindle that spark and get them going on becoming a Licensed Amateur Radio Operator.

How do you make the Wooden CW Key Kits? It is really easy. Get some paint stirrers from the paint store, the 5 gallon kind work best; a bag of rubber bands , "the nice and thick kind"; a buzzer and a battery pack; a roll of metal flashing tape "with a sticky back"; and some totes to put it all in. Each Wooden CW Key will need a paint stirrer cut into two 4" and one 1" piece; Two ½" by the width of the tape parts for the electrical path; and one or two rubber bands. Each longer five gallon paint stirrer will make two Wooden CW Keys. If you are going to make a lot of them, you may want to rip 2'x4's into ¼" strips, and then cut the 4" and 1" parts. We did this when we made over a thousand units. See photos for instructions on how to assemble the kits.



Top is how they get the kit  
Bottom is the parts of the kit

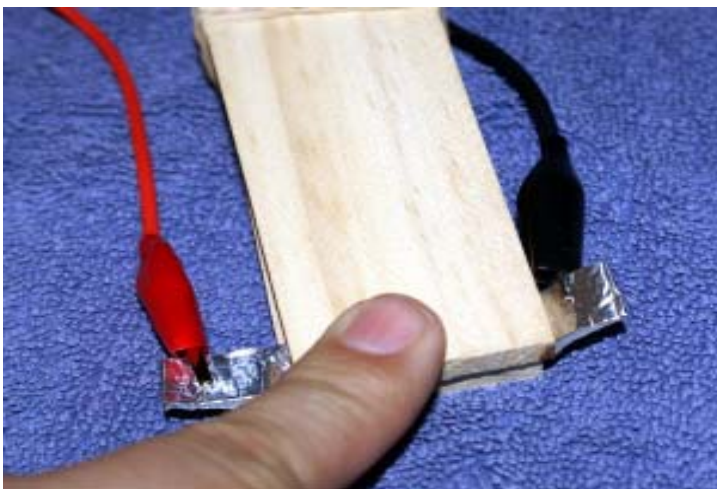
## Wooden CW Keys Continued



Peel the tape back and fold one end 1/4 inch on to it's self



Make sure you line up the tape as shown



Ad power and start sending code!

For the Buzzer, you will need a battery pack, a buzzer, some wire and alligator clips, and one full paint stirrer stick. Mount the buzzer and battery pack to the paint stirrer stick, hook up the wires and make sure you use alligator clips at the ends that will be hooked up the Wooden CW Keys.

Now, for the fun. As you sit at the table with a fully assembled Wooden CW Key pounding out code, you will have questions: What are you doing? What is that? You tell them that you are sending a message using CW. Show them how it makes the sound and ask them if they would like to make one and send their name in CW. After the kid jumps up and down saying YES, oh my YES, you show them how to assemble the Wooden CW Key. Then you have them write down their name on the CW Code Paper. The CW Code Paper has the code all spelled out for them and a place to write their name. Then you have them hook it up to the buzzer stick and have them pound out some CW. It is very important to know the kids will do their very best to send it. Please be patient with them. Remember, you are there to spark an interest in them. At times, we had four kids at a time making the Wooden CW Keys and eight kids standing by to make theirs. We even had some adults make some too. When the kids are all done, you hand them the key and tell them it is theirs to KEEP! Take note, their eyes will get really big and a smile will soon follow. We had some kids start to tap out some CW and ask why they can't hear it. You show the kid's mom and dad how to make the buzzer stick and tell them where they can buy the parts. Then, you hand them a club flyer and invite them to your local club meeting.

This really works. You will get some of them to attend your club meeting and some you will see at other events in town; and the kids will run over and say, "Can I make a Wooden CW Key?"

Paul KC6QLS





# Amateur Radio At Large

From Rich N6NKJ



Hello all,

It is really great to see so many old and new faces at our club meetings the past few months. I believe we now have 195 members, and I hope we will get more. When I joined the club so many years ago, there were around 300 members, but just like any type of club, members moved on to other things.

With one month to go, Wild Land Fire Safety Training is "sold out". I cannot ever remember this class being filled this fast, and there are people on a waiting list. There will, I am sure, be more classes on Wild Land Fire Safety Training offered. I do know that there will be one in Valley Center in June, but I am not the coordinator for that one.

As most of you know, our club is involved in providing public and emergency services through CAL FIRE, the East County EOC and our East County Emergency Response Team, and we are looking for more volunteers. For CAL FIRE, we can rely on a whole bunch of people on the weekends, but during the week a lot of these people still have to work and cannot go out on patrol. I would like 12 people to sign up and be available for Red Flag Patrols on week days; that would give us five routes and two for net control. While more would be better, I would like to have 12 for now. Please don't wait until another Wild Land Fire strikes before you get involved with the VIP Red Flag Patrol.

I hope all of you will take a look at the club's calendar that Steve KO4QT maintains. It is full of upcoming events, some of which need "live bodies" to help with various events. Let's not forget our friends in REACT; they also could use help with their events as well. Their members have helped us out with several of our past events as well as always helping with Red Flag Patrols.

Can you believe it? Field Day is just two months away. I cannot believe how fast this year is going.

Soon it will be Halloween, then Thanksgiving, and Christmas, then New Years. Time to me is like rewinding a video tape; it starts out slow, then it picks up speed and before you know it, it has gone.

Since I still have bronchitis and am not feeling too good, I will say 73's and 88's for now. But as always, remember all of our brave men and women who are keeping all of us safe, serving in faraway places. When you see one of these true heroes, shake their hand and say THANK YOU.

Rich, N6NKJ

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## CREST Museum



# Membership Report

Ann KC6TBG



Welcome New Members



**Bill Metzger W6RGS**  
**WAMO # 1787**



**Buck Hourcade WH7IZ**  
**WAMO #1786**

## Individual Dues Membership:

**\$18.00 per year(\$1.50 per month):**

January	\$ 18.00	July	\$ 9.00
February	\$ 16.50	August	\$ 7.50
March	\$ 15.00	September	\$ 6.00
April	\$ 13.50	October	\$ 4.50
May	\$ 12.00	November	\$ 3.00
June	\$ 10.50	December	\$ 1.50 *

**\*plus \$18.00 for the following year**

## Family Dues Membership:

**\$30.00 per year (\$2.50 per month):**

January	\$ 30.00	July	\$ 15.00
February	\$ 27.50	August	\$ 12.50
March	\$ 25.00	September	\$10.00
April	\$ 22.50	October	\$ 7.50
May	\$ 20.00	November	\$ 5.00
June	\$ 17.50	December	\$ 2.50 *

**\*plus \$30.00 for the following year**

Ann, KC6TBG  
Membership Chair





**J. P. TURNER & COMPANY, L.L.C.**

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www.patrickchambers.com

## *From The Vice-President Continued*

the next word Chuck wrote down was "copy". Trying to make sense of this, Chuck quickly realized this guy wasn't saying "so lid", he was saying "solid copy". He was actually giving Chuck a compliment rather than an insult!

Being a Volunteer Examiner (VE) for Amateur Radio Licensing and Vice President for our Club, I get the opportunity to talk to a lot of new HAM's. The biggest concern I hear from them is that they're new to all of this and don't know what to do or say, or how to say it on the air. A large number of new HAM's are so afraid of what people will think of their lack of experience, they will never get on the air and may actually let their licenses expire, never having keyed up a radio. Chuck's anecdote made me think about those concerns. If you're a new HAM and fall into this category, Chuck's experience should show you that others aren't and won't be as critical of you as you are, and that you're actually a better operator than you imagine. You'll find that most HAM's will eagerly offer you encouragement and assistance, so, get on the air and have fun!

We have a number of events coming up where volunteers are needed! These events are:

May 9 <sup>th</sup>	Pacific Crest Trail 50 Mile Run (Laguna Mountains)
June 6 <sup>th</sup> & 7 <sup>th</sup>	100 Mile Endurance Run (Cuyamaca Mountains)
June 12 <sup>th</sup> -14 <sup>th</sup>	SANDARC Booth at the San Diego County (Del Mar) Fair
June 13 <sup>th</sup>	Kid's Best at the Fair
June 26 <sup>th</sup> -28 <sup>th</sup>	Field Day Weekend at the Al Bahr Shrine Camp, Mt Laguna CA

Upcoming Classes and other Stuff:

May 2 <sup>nd</sup>	Club Booth at the Santee Swap Meet (gate opens at 6:30am for shoppers)
May 2 <sup>nd</sup>	One-Day Technician Licensing Class-VE testing will immediately follow the class
May 23 <sup>rd</sup>	Wild Land Fire Safety Training (class required to join in on VIP Red Flag Patrols)

May 30<sup>th</sup> East County CERT Academy (Community Emergency Response Team classes)

If you're interested in helping out with any of these events, please contact me either by email: ko4qt@hotmail.com or phone, (619)733-2320. I'll insure you get on the volunteer list for the event(s) you want to participate in.

The program for our May 14<sup>th</sup> meeting is titled: *Why on earth can't I get a decent match on my antenna? And will be presented by Dan Severance, N6ERD*. Have you ever had an antenna that had a high SWR and worked for hours trying to match it...and the antenna won? This will be a "hands on" meeting. First, Dan will explain the fundamentals of antenna matching (how you know whether the antenna needs to be lengthened or shortened) as well as how to use an antenna analyzer to tell your antenna's resonant frequency. After his explanation, we'll break down in groups where some of our Club members will be on hand with antennas and analyzers to walk you through the antenna adjusting process. At this meeting, you'll be able to "get your hands dirty" so to speak, when you adjust those antennas yourself using an antenna analyzer, and see just how easy antenna matching can be.

73's and I'll see you at the meeting,

Steve  
KO4QT

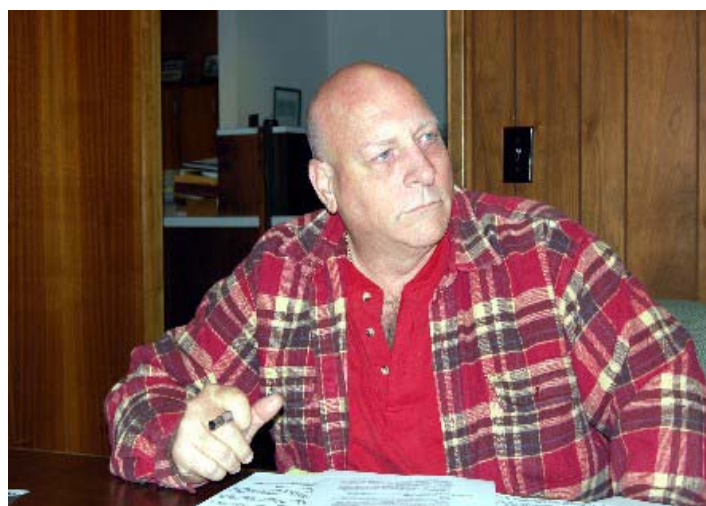




## Club Photos



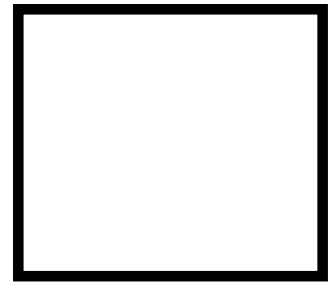
**Eva KI6RVX, Cynthia KI6UQN, Ellen N6MYG, Vicky KI6WOE,  
and Alton N6VOC**



Amateur Radio Club of El Cajon  
P.O. Box 50  
El Cajon, CA 92022



Issue Date 5/2009



**For Ham Radio  
Classes  
EXTRA License Starts  
After Field Day**

**Please Contact:  
Mike Maston  
N6OPH  
(619) 296-9067**

**Please Visit Our Website at  
[www.WA6BGS.org](http://www.WA6BGS.org)**



### **VEC Testing Sites**

1 <sup>st</sup> Saturday:	El Cajon 10:00 am First Lutheran Church of EC 867 South Lincoln Ave.
2 <sup>nd</sup> Saturday:	Carlsbad 9:30 am Carlsbad Safety Center Orion Way Carlsbad
3 <sup>rd</sup> Saturday:	North Park 10:00 am North Park Recreation Center 4044 Idaho Street San Diego
4 <sup>th</sup> Saturday:	Chula Vista 8:30 am Fire Station #7 1640 Santa Venetia Chula Vista
5 <sup>th</sup> or last Saturday:	Escondido 9:00 am LDS Church 1917 East Washington St.

To make advance reservations or to find out more info  
from the site captain, please call 465-EXAM (3926)